Serial No.: 10/518,569
 PU020298

 Art Unit 2411
 CUSTOMER NO.: 24498

Non-Final Office Action dated: September 24, 2010

Remarks/Arguments

The non-final Office Action dated September 24, 2010 ("Office Action") indicated that pending claims 1, 6-10, and 12, and 14 stand rejected. The examiner indicated a willingness to allow dependent claim 5 if re-written to include all of the features of its base and intervening claims. Applicants had previously cancelled claims 2-4, 11, and 13. The claims remain as previously presented.

Claim Rejection under 35 U.S.C. § 112

Claims 12 and 14 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Office Action alleges that the feature of "counting, by a broadcast router, a number of transitions of the serialized AES digital audio data from the first transition until the number of transition reaches a count of 33", as recited in claim 12 lacks antecedent basis in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claim 14 dependents from claim 12.

Applicants respectfully traverse the § 112 rejection.

Applicants' independent claim 12 recites features which find support at least in Figure 5 and at page 12, lines 14-page 13, line 13 of applicants' specification as originally filed. Thus, a person having ordinary skill in the art would reasonably understand the aspects of the claim.

For example, the claimed feature of "counting, by a broadcast router, a number of transitions of the serialized AES digital audio data" finds support at page 12, lines 14-27, which recite:

Referring next to FIG. 5, the method by which the time extraction circuit 297 certain time information, specifically the *number of fast clocks* separating successive preambles, *from the AES serialized digital audio data stream* will now be described in greater detail. The method commences at step 350 and, at step 352, the AES serialized digital audio data stream from which the aforementioned time information is to be extracted is input the time extraction circuit 297. Continuing on to step 353, *the transition count "T" is set to zero* and the time extraction circuit 297 begins *examining the incoming AES serialized digital audio*

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data stream for transitions. At step 354, the time extraction circuit 297 detects a first transition in the incoming AES serialized digital audio data stream and presumes that the detected transition indicates the start of a first preamble. The method then proceeds to step 355 where the time extraction circuit 297 begins a count of the number of fast clock pulses between the detected preamble and a subsequent preamble in the incoming AES serialized digital audio data stream. To do so, the method will first proceed to step 356 where the transition count T is incremented by one. Emphasis added.

In another example, the claimed feature of "the number of transitions of the serialized AES digital audio data from the first transition until the number of transition reaches a count of 33" finds support at page 12, line 28-page 13, line 13, which recites:

Proceeding on to step 357, the time extraction circuit 297 then compares the transition count T to 33, the number of transitions which occur between successive preambles of AES-3 serialized digital audio data stream. If it is determined at step 357 that the transition count T is less than 33, then the time extraction circuit 297 concludes that the subsequent preamble has not yet been detected. The method then proceeds to step 358 where the count of fast clock pulses continue. Continuing on to step 359, the time extraction circuit 297 resumes its examination of the incoming AES-3 serialized digital audio data stream for a subsequent transition. Upon detection of a subsequent transition, the time extraction circuit 297 will again determine if the detected transition indicates the start of a subsequent preamble in the incoming AES-3 serialized digital audio data stream. To do so, the method returns to step 356 where the time extraction circuit 297 would again determine, in the manner previously described with respect to the first detected transition, if the subsequently detected transition is indicative of a subsequent preamble in the incoming AES-3 serialized digital audio data stream.

Returning now to step 357, <u>if the transition count T is equal to 33</u>, the method proceeds to step 360 where the time extraction circuit 297 concludes that the detected transition indicates the start of a subsequent preamble in the incoming AES-3 serialized digital audio data stream. Emphasis added.

For at least the reasons stated above, Applicants respectfully assert that the feature of claim 12 of "counting, by a broadcast router, a number of transitions of the serialized AES digital audio data from the first transition until the number of transition reaches a count of 33" finds

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clear support in the specification as originally filed in such a way as to reasonably convey the claimed invention to a person having ordinary skill in the art. Accordingly, Applicants respectfully request the withdrawal of the 112 rejections of claims 12 and 14.

Claim Rejections under 35 U.S.C. § 103

Claim 1 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Angelici et al. ("New Architecture for an AES-EBU Digital Audio Receiver" IEEE Transactions on Consumer Electronics, Vol. 43, No. 3, August 1997, "Angelici") further in view of Lydon et al. (US 6,757,302, "Lydon"). Claims 6-9 stand rejected over Angelici and Lydon, and further in view of Lyle (US 7,295,578, "Lyle"). Claim 10 is rejected as unpatentable over Angelici. Applicants respectfully traverse these rejections.

In re Wada and Murphy, Appeal 2007-3733, the BPAI stated that:

When determining whether a claim is obvious, an examiner must make "a searching comparison of the claimed invention including all its limitations – with the teaching of the prior art." In re Ochiai, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, "obviousness requires a suggestion of all limitations in a claim." CFMT, Inc. v. Yieldup Intern. Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing In re Royka, 490 F.2d 981, 985 (CCPA 1974)). Moreover, as the Supreme Court recently stated, "there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR Int'l v. Teleflex Inc., 127 S. Ct. 1727, 1741 (2007) (quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006) (emphasis added)).

Applicants' claim 1recites:

A method for extracting selected time information from a stream of serialized Audio Engineering Society (AES) digital audio data, comprising:

detecting, by a broadcast router, a first transition indicative of a first preamble of said stream of serialized AES digital audio data:

detecting, by the broadcast router, a second transition indicative of a subsequent preamble of said serialized AES digital audio data;

determining a clock pulse count separating said first preamble and said subsequent preamble; and

transferring the determined clock pulse count as a time to

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<u>a decoding logic circuit for decoding said stream of serialized</u> <u>AES digital audio data by utilizing the determined time</u>. Emphasis added.

The Office Action at page 7 alleges that Angelici discloses or suggests the feature of transferring the determined clock pulse count as a time to a decoding logic circuit for decoding said stream of serialized AES digital audio data by utilizing the determined time, as set forth in Applicants' claim 1. Applicants respectfully disagree with the examiner's characterization of Angelici.

Angelici discloses an AES-European Broadcasting Union (AES-EBU) receiver which implements a Phased-Locked Loop (PLL) function, a digital decoder, and a course detector which allegedly counts the clock pulses between consecutive preambles and comparing the number with an expected number. (Angelici, page 694, right column, top and page 696, right column, top.). Angelici also discloses a data decoder which appears to receive the PLL clock signal. (Angelici, Figure 1.).

Although Angelici appears to disclose a course detector which may count the number of clock pulses between preambles, Angelici makes no mention or suggestion of transferring the *number of clock pulses* to the data decoder. Instead, Angelici appears to suggest that the *PLL clock signal itself* is accessed by the data decoder. Furthermore, Angelici teaches that the purpose of counting the clock pulses between preambles is to detect in a more precise way if the clock is faster or slower than the correct value, and thus fine tune the frequency. (Angelici, page 694, right column, top). Therefore, a person having ordinary skill in the art would reasonably conclude that the number of clock pulses would be used by Angelici's course detector but not the data decoder. As such, Angelici does not disclose or suggest the feature of *transferring the determined clock pulse count as a time to a decoding logic circuit* for decoding said stream of serialized AES digital audio data by utilizing the determined time.

In addition, Angelici teaches a data decoder for ensuring correct digital word recovery even if the voltage-controlled oscillator is in an "out-of-lock" condition. The decoder allegedly uses a synchronization signal and *the clock provided by the PLL*. (Angelici, page 694, right column, middle.). However, Angelici does not disclose or suggest any utility of the *number of clock pulses* by the data decoder and as such, Angelici does not suggest decoding a stream of serialized AES digital audio data by *utilizing the determined time*. Therefore, Angelici does not

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suggest transferring the determined clock pulse count as a time to a decoding logic circuit for decoding said stream of serialized AES digital audio data by utilizing the determined time.

Lydon does not cure the deficiencies of Angelici as noted above with respect to claim 1. Nor does the Office Action rely on Lydon as disclosing any of the features discussed above.

Accordingly, the combination of Angelici and Lydon does not disclose or suggest every feature of claim 1. Therefore, Applicants respectfully request withdrawal of the rejection of claim 1 under 35 U.S.C. 103(a).

Claims 6-9 depend from allowable claim 1 and incorporate the features of claim 1. The Office Action has cited Lyle to show an encoder. However, Lyle does not show or suggest "transferring the determined clock pulse count as a time to a decoding logic circuit for decoding said stream of serialized AES digital audio data by utilizing the determined time," as recited in claim 1. Accordingly, Lyle does not cure the deficiencies of the combination of Angelici and Lydon. Furthermore, the Office Action does not rely on Lyle for disclosing or suggesting the feature of transferring the determined clock pulse count as a time to a decoding logic circuit for decoding said stream of serialized AES digital audio data by utilizing the determined time. Therefore, Applicants request withdrawal of the rejection of claims 6-9 under 35 U.S.C. 103(a).

Independent claim 10 differs from claim 1 and requires consideration on its own merits. However, claim 10 includes, for example: "a target component coupled to said decoder circuit, said target component receiving said extracted time information from said stream of serialized AES digital audio data; wherein said target component utilizes said extracted time information while executing at least one function thereof."

Applicants apply the above arguments for claim 1 with respect to independent claim 10 according to the interpretation of claim 10. As such, Applicants respectfully submit that claim 10 is allowable over Angelici and respectfully requests the withdrawal of the rejection of independent claim 10 under 35 U.S.C. 103(a).

The Office Action does not reject claims 12 and 14 based on prior art references. Accordingly, claims 12 and 14 are presumed to be patentable subject matter.

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Conclusion

In view of the foregoing, Applicants solicit entry of this amendment and allowance of the claims. If the Examiner cannot take such action, the Examiner should contact the Applicants' attorney at (609) 734-6820 to arrange a mutually convenient date and time for a telephonic interview.

No fees are believed due with regard to this Amendment. However, if there is a fee, please charge the fee or credit any overpayment to Deposit Account No. 07-0832.

> Respectfully submitted, Carl L. Christensen et al.

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